

Method For Surgically Restoring Coronary Blood Vessels

ABSTRACT

A method for surgically restoring a coronary artery having an atheroma, to more normal structure and function, includes the steps of:

- 5 a. making an arteriotomy incision over the length of the coronary artery atheroma;
- b. spreading the cut edges of the arteriotomy incision;
- c. separating the plaque from the medial interface of a vessel wall of the coronary artery;
- 10 d. extracting the atherosclerotic plaque from the coronary artery, and from any side branch artery;
- e. inserting a pre-expanded endocoronary stent with vessel anchor prongs into the opened coronary artery;
- f. closing the coronary artery over the stent with sutures; and
- 15 g. applying extravascular drug delivery material over the stent implantation site.

In another feature, the extravascular drug delivery material provides a local controlled release of bioactive factors to inhibit both thrombosis and smooth muscle cell proliferation.